

Abstract of the Disclosure

Microbiological control in aqueous media and/or eradication or reduction of biofilm on a surface in contact with such media is achieved by introducing into the aqueous medium a microbiocidally effective quantity of one or more 1,3-dibromo-5,5-dialkylhydantoins where one of the alkyls is methyl and the other is a C<sub>1-4</sub> alkyl, wherein (i) the molar quantity of 1,3-dibromo-5,5-dialkylhydantoin introduced is less than the molar quantity of N,N'-bromochloro-5,5-dimethylhydantoin that would be required to effect the same degree of microbiological control in that medium, (ii) the molar quantity of the 1,3-dibromo-5,5-dialkylhydantoin introduced releases an amount of "free chlorine" that is greater than the amount of "free chlorine" that would be released in that medium by an equimolar quantity of N,N'-bromochloro-5,5-dimethylhydantoin, and (iii) the amount of "free chlorine" released by the quantity of the 1,3-dibromo-5,5-dialkylhydantoin introduced is greater than the amount of "free chlorine" that could be predicted to be released by that quantity of 1,3-dibromo-5,5-dialkylhydantoin on the basis of the amount of "free chlorine" that would be released in that medium by an equimolar quantity of N,N'-bromochloro-5,5-dimethylhydantoin.